

Two new genera and species of oophilous encyrtids from Argentine

(Insecta, Hymenoptera)

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Abstract

In this paper the author describes *Dionencyrtus fiorentinoi* and *Amauroencyrtus micans*, new genera and species of oophilous encyrtids, reared from eggs of *Criodion angustatum* (Buquet) (Coleoptera, Cerambycidae) in Santiago del Estero Province (Argentine).

The types of the two new encyrtids described in this paper are deposited in the collection of the La Plata Museum. I received this material from forestry engineer Dante C. Fiorentino, Director of Biological Control Institute, National University in Santiago del Estero (Argentine). It is my pleasant duty to express my thanks in particular to engineer Fiorentino for this and other interesting material, which he was kind enough to offer me for identification. I also thank Mr. Klaus Kiessel, Forest Zoology Institute, Freiburg im Breisgau University (Federal Germany), for the scanning electron microscope pictures.

Encyrtidae

Dionencyrtus gen. nov.

Female. – Occipital margin sharp; temples narrow at top eyes; frontovertex rather narrow, about one fourth the head width and twice as long as broad; mandibles 3-toothed, the inner tooth truncate; maxillary palpi 4-jointed; labial palpi 3-jointed; eyes large with sparse short pile; ocelli in an acute-angled triangle, lateral ocelli close to the eye margin and somewhat separate of the occipital margin; scrobes deep with outer margins rounded; antennae as in figures 1 and 5, with one annellus; scape expanded beneath; funicle two-colored.

Head, pronotum, mesoscutum, axillae and pleuron, reticulated; mesoscutum with minute piliferous punctures; gaster with weak reticulate sculpture; scutellum almost smooth. Chaetotaxy as in figures 1 to 7; scutellum with scanty long setae on anterior half and 2+2 longer setae on posterior half, situated at line of the sensorial plates and apex.

Mesoscutum convex, entire; axillae separated by posterior margin of mesoscutum; scutellum also convex; propodeum medially short, with spiracles large, oval and situated near of anterior border. Forewings as in figure 6; triangular expansion of submarginal vein indistinct but with a long seta. Middle tibial spur little shorter than middle basitarsus.

Gaster shorter than mesosoma, almost circular in outline; cercal plates situated about imaginary transverse line drawn in the middle; ovipositor long, arises near the base and the exerted part is as long as half length of gaster.

Male. – Antennae as in figure 7, with club entire or confusedly 2-segmented. Gaster subtriangular in outline, narrower than mesosoma.

Type-species. – *Dionencyrtus fiorentinoi* spec. nov.

Distribution. – Neotropical region.

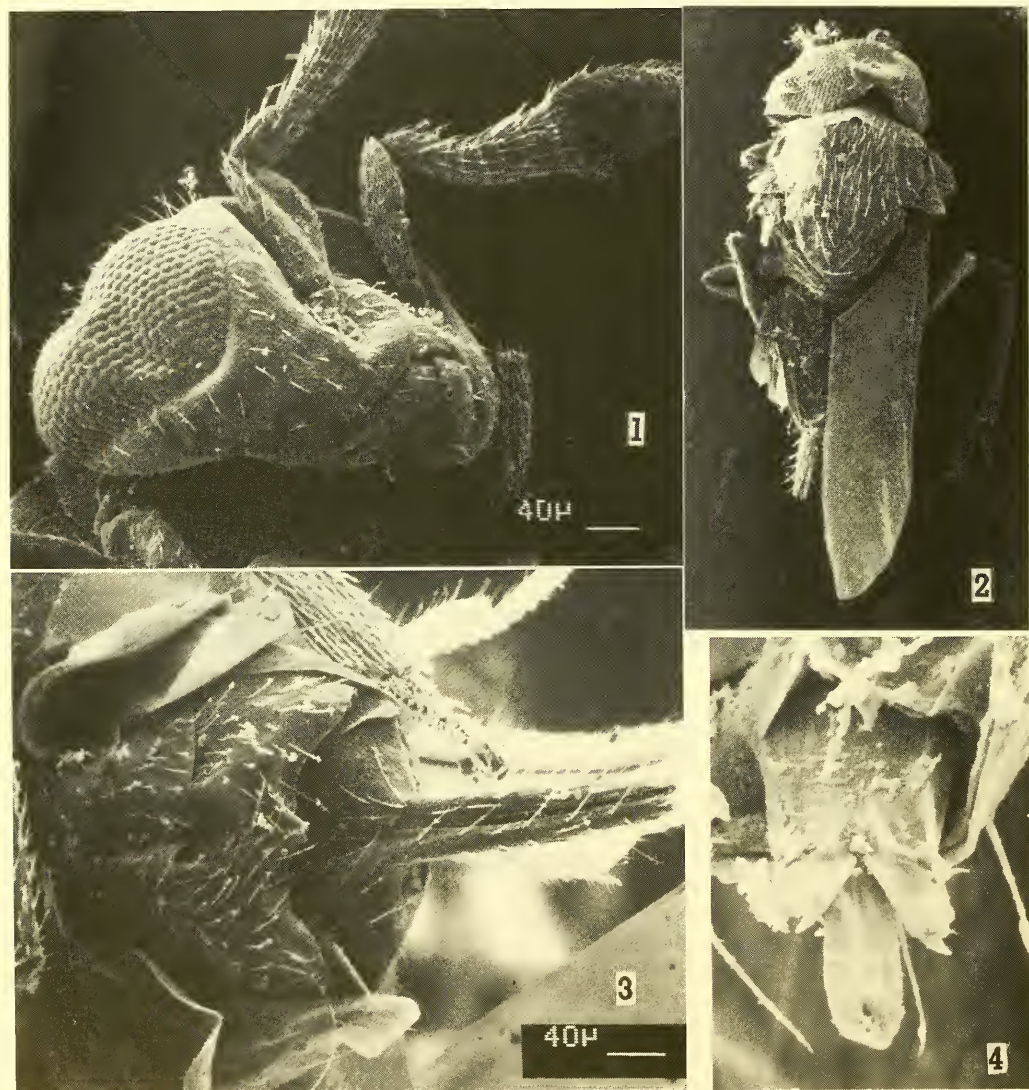
Bionomy. – Reared from eggs of a Cerambycidae (Coleoptera).

Remarks. — This new genus may be related to *Tyndarichus* Howard, 1910; differs in having the triangular expansion of submarginal vein indistinct, the postmarginal vein longer, not rudimentary and the ovipositor strongly exerted.

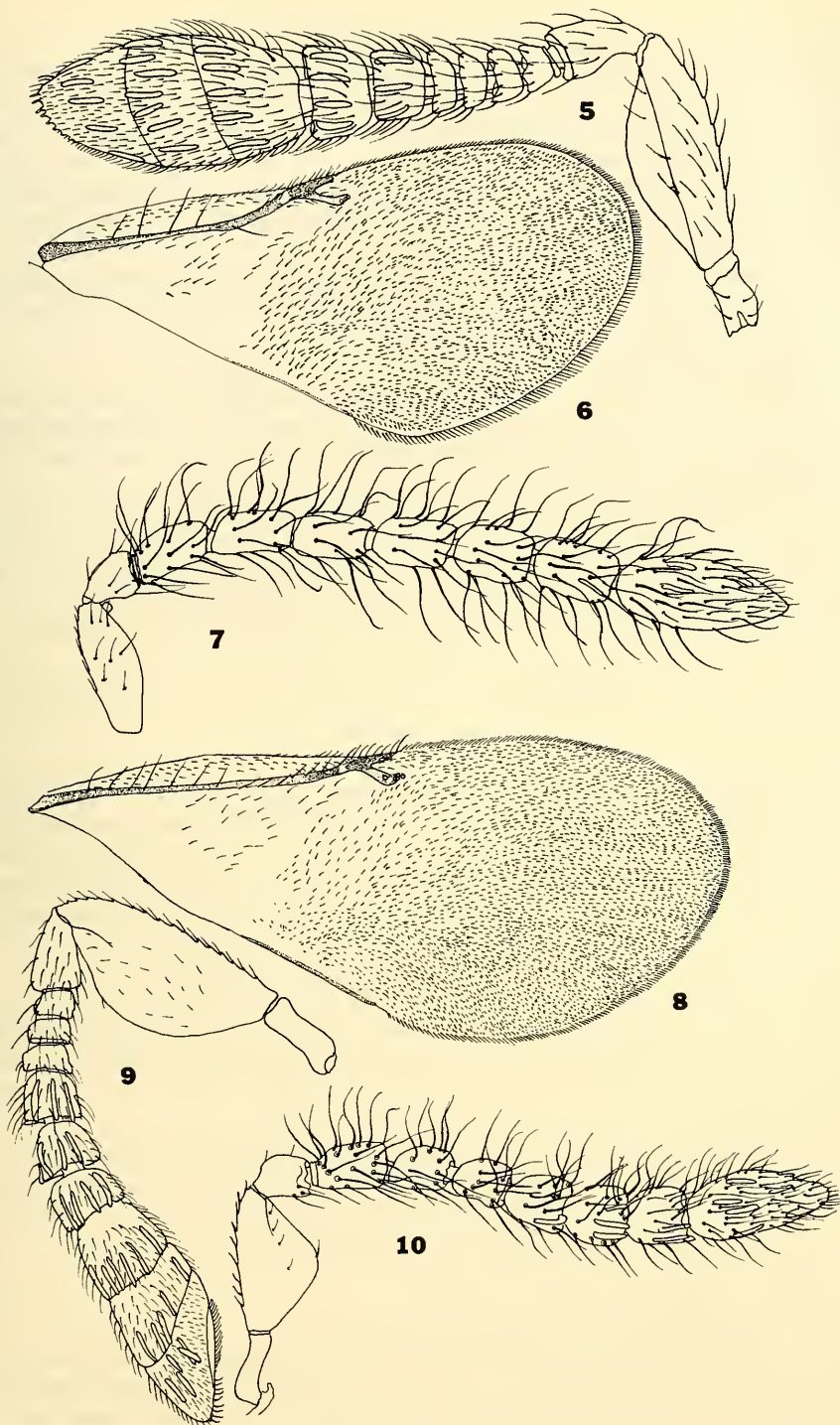
Dionencyrtus fiorentinoi spec. nov.

(Figures 1 to 7)

Female. — Black and little shining with violaceous reflections in the frontovertex and scutellum and green in remainder of body. Antennae blackish, cleared in scape base and pedicel apex. Apical third of



Figures 1 to 4: *Dionencyrtus fiorentinoi* sp. n. — 1, head and antennae, female; 2, female; 3, ovipositor; 4, male genitalia.



Figures 5 to 7: *Dionencyrtus fiorentinói* sp. n. – 5, antenna, female; 6, forewing, female; 7, antenna, male.
Figures 8 to 10: *Amauroencyrtus micans* sp. n. – 8, forewing, female; 9, antenna, female; 10, antenna, male.

scape and the funicle joints V and VI, orange-colored. Coxae concolour with body, cleared in apex; remainder of anterior legs, middle femora and tibiae, hind tibiae, base and apex of their femora, middle and hind tarsi and apex of the ovipositor sheaths, yellowish, more or less darkened in the anterior femora and tarsi, middle femora, subbasal annullo in the tibiae and, apical joint of middle and hind tarsi. Wings hyaline with blackish nervures.

Length and (width) of antennal segments: R 0,051 (0,026) I 0,176 (0,047) II 0,067 (0,041) III 0,023 (0,036) IV 0,023 (0,039) V 0,018 (0,041) VI 0,018 (0,047) VII 0,036 (0,057) VIII 0,047 (0,067) IX 0,072 (0,096) X 0,059 (0,098) XI 0,062 (0,093).

Length of forewings 0,978; greatest width 0,457; length of longer marginal setae 0,018; relative length of submarginal, marginal, postmarginal and stigmal veins 30:5:2,5:4. Length of hindwings 0,749; greatest width 0,191; length of longer marginal setae 0,036.

Length of body, included ovipositor, 1,4.

Male. – Antennal scape entirely obscure and flagellum yellowish. Obscure parts of the legs obscurer than female. Length and (width) of antennal segments: R 0,036 (0,021) I 0,129 (0,047) II 0,047 (0,041) III 0,067 (0,036) IV 0,072 (0,036) V 0,067 (0,041) VI 0,072 (0,041) VII 0,072 (0,047) VIII 0,072 (0,049) IX 0,145 (0,062). Length of body 1.

Distribution. – Santiago del Estero Province. Type-locality: Los Pirpintos (Copo Department).

Bionomy. – Reared from eggs of *Criodion angustatum* (Buquet) (Coleoptera, Cerambycidae). Forestry engineer D. C. Fiorentino and collaborators make preparation of a paper dealing with bionomy of this species.

Remarks. – Named in honour of my friend, forestry engineer Dante C. Fiorentino.

Material studied. – 1♀ holotype, 1♂ allotype and 109♀♀ and 112♂♂ paratypes, Los Pirpintos (Santiago del Estero – República Argentina) 1982, D. C. Fiorentino and V. H. Bellomo, leg.

Amauroencyrtus gen. nov.

Female. – Head little narrower than mesosoma; in frontal aspect wider than height; occipital margin rounded; frontovertex broad, equal to half the head width; malar space equal one third of eye height; malar sulcus present; eyes great, hairy; temples narrow; ocelli in an obtuse-angle triangle; lateral ocelli close to eye margin; mandibles with 2 teeth and a truncation; maxillary palpi 4-jointed; labial palpi 3-jointed. Antennae as in figure 9; antennal torulus beneath imaginary transverse line extending between ventral margins of compound eyes, slightly closer to clypeal margin than to eye; scape very strongly laminately compressed and medially expanded as in *Amaurilyma*.

Mesoscutum entire with fine scaly reticulations and minute piliferous punctures and numerous obscure and short setae; axillae separated; scutellum smooth with short setae on anterior half and 2+2 longer setae on posterior half situated at line of sensorial plates and apex; propodeum medially short with circular spiracles situated near of anterior border. Forewings as in figure 8. Middle tibial spur little shorter than middle basitarsus.

Gaster oval, as long and as wide as mesosoma excluding ovipositor; cercal plates situated about imaginary transverse line drawn in the apical third; ovipositor short, arises near the imaginary transverse line drawn between cercal plates; the exerted part somewhat longer than one fourth the length of gaster.

Male. – Antennae as in figure 10. Gaster shorter than mesosoma.

Type-species. – *Amauroencyrtus micans* spec. nov.

Distribution. – Neotropical region.

Bionomy. – Reared from eggs of a Cerambycidae (Coleoptera).

Remarks. – *Amauroencyrtus* runs in the key of the neotropical genera of Encyrtidae by J. S. NOYES, 1980, Bull. Br. Mus. nat. Hist. (Ent.) 41(3): 111–169, near to *Coelopencyrtus* Timberlake, 1919, but differs from this in the compressed and expanded scape in both sexes. From *Amaurilyma* Graham, 1958, it also differs in having the scutellum rather smooth.

Amauroencyrtus micans spec. nov.
(Figures 8 to 10)

Female. – Black with violaceous reflections in the mesoscutum, scutellum and gaster. Scutellum apex and their lateral zones and gaster base, with green reflections. Fore coxae apex, trochantellus, fore femora base, base and apex of middle femora, tibiae, except a sub-basal obscure annullo, and spurs, white or pale yellow; tarsi yellowish darkened toward apex. Wings hyaline with blackish nervures. Length and (width) of antennal segments: R 0,051 (0,014) I 0,222 (0,103) II 0,078 (0,047) III 0,026 (0,036) IV 0,016 (0,039) V 0,021 (0,047) VI 0,041 (0,057) VII 0,047 (0,062) VIII 0,041 (0,067) IX 0,072 (0,083) X 0,072 (0,093) XI 0,078 (0,098).

Length of forewings 1,168; greatest width 0,508; length of longer marginal setae 0,015; relative length of submarginal, marginal, postmarginal and stigmal veins 61:7:6:7. Length of hindwings 0,876; greatest width 0,191; length of longer marginal setae 0,026.

Length of body, included ovipositor, 1,4.

Male. – Antennae as in figure 10. Antennal flagellum yellowish with the first three joints darkened. Length and (width) of each segment: R 0,062 (0,023) I 0,140 (0,078) II 0,052 (0,041) III 0,067 (0,044) IV 0,059 (0,041) V 0,057 (0,044) VI 0,059 (0,054) VII 0,059 (0,062) VIII 0,059 (0,057) IX 0,137 (0,062). Length of body 1.

Distribution. – Santiago del Estero Province. Type-locality: Los Pirpintos (Copo Department).

Bionomy. – Reared from eggs of *Criodion angustatum* all together with *Dionencyrtus fiorentinoi*; will be studied by forestry engineer D. C. Fiorentino and collaborators in the paper in preparation dealing with bionomy of *D. fiorentinoi*.

Material studied. – 1 ♀ holotype, 1 ♂ allotype and 60 ♀♀ and 14 ♂♂ paratypes, Los Pirpintos (Santiago del Estero – República Argentina). 1982, D. C. Fiorentino and V. H. Bellomo, leg.

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